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COMNAVFOR**EAST GERMANY/VP-SKE Diesel Engine Standardization Program****ADVANCED REPORT FOR NAVY USE ONLY****XXXXXXXXXX**

In order to streamline diesel engine construction and maintenance, VP-SKE has decided to have all of their craft equipped with a limited number of diesel engine models. Though the diesels will be of varying capacities, most of the component parts will be inter interchangeable. Moreover, most of the diesel engine models were to be of the ("Baukastenform") type. Designs selected for above streamlining program were: the HK-65, conventional BUCKAU-WOLK diesels, the 1,400-HP diesel as built by D.M.R. at ROSTOCK, and the 20-KVD-25 (also known as D-2,500). The INSTITUT FÜR MOTORENBAU LUDWIGSFELDE, formerly VEB K.E.B. ROSLAU, headed by Herr BOEHME has been entrusted with all the designing and developing required for a standardizing the above diesels in 1956. This is considered feasible. In addition, VP-SKE was interested in new "Kreislaufmotor" being developed by I.S.V. ABTEILUNG DRESDEN. Installation of 2,400-HP diesels from VEB E.E.M. EIN HALBEN-STADT in VP-SKE craft was dropped.

1. HK-65 diesel.

This was an old engine of JUNKERS design. Three types were installed as auxiliary diesels aboard VP-SKE craft: 1-HK-65, 2-HK-65, 3-HK-65. In these designations, the first figure indicates the number of cylinders each

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 with a capacity of about 12 HP. In other words, ME-63 diesels with a capacity ranging from about 12 to 36 HP are in use. Development problem was to design and develop further variants with a capacity of up to about 50 and 70-HP respectively also for duties as auxiliaries aboard VP-SKE craft. 6-cylinder series engines or V-engines with either 4 or 6 cylinders were planned.

2. Conventional BUCKAU-WOLK diesels.

The 80, 100, 180, and 200-HP diesels as already built by BUCKAU-WOLK Plant and serving as auxiliaries aboard ship have been selected.

3. 1,400-HP D.M.R.-built diesel.

This diesel was planned to be installed without any changes.

4. 20-KVD-25 marine diesel.

Information on this diesel and on INSTITUT FUER MOTORENBAU LUDWIGSFELDE will be furnished in a subsequent report.

5. "Kreislaufrator".

During World War Two when working as a test stand engineer with an unidentified German Navy research institute, Herr WITTMANN of I.S.W. (INSTITUT FUER SCHIFF-BAUTECHNIK at WOLGAST) branch DRESDEN worked on a "Kreislaufrator". The planned usage of this "meter" was unknown. In 1955, Herr WITTMANN asked to have the "Kreislaufrator" put on the VP-SKE research project list in order to eventually find out what it could be used for. "Kreislaufrator" has since been one of the VP-SKE research projects for I.S.W. and Herr WITTMANN's branch office at DRESDEN was officially authorized to begin designing and developing the engine. The engine was to work on the following principle: it was to use its own exhaust gases ("Abgas") to which were to be added fresh oxygen from oxygen containers in order to not have any exhaust gas escape and render the engine independent from outside fresh-air supply. Regarding the engine's possible usage, the former German Navy had been working on torpedoes equipped with very small engines of the above type during World War II.

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6. Marine diesels from VEB SKM HALBERSTADT at HALBERSTADT.

In 1952, VP-SKE ordered 2 or 3 2,400-HP marine diesels from VEB SKM HALBERSTADT diesel engine plant. They were heavy, slow running (about 600 RPM) engines especially designed by Herr BOEHME of VEB KRB ROSLAU for either WAL or DRACHE class vessels. The construction of one of the 2 had begun in NEPTUN Shipyard at ROSTOCK in 1953. The order was cancelled after 17 June 1953. When the plant reported the first engine ready for delivery later, VP-SKE did not accept it. The engine was delivered to NEPTUN Shipyard instead which intended to install it in one of the 3,000-ton freighters.

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